

| SLEEP, SLEEP DISORDERS, AND BIOLOGICAL RHYTHMS | | |
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| Pennsylvania Academic Standards for Science and Technology – Grades 10 & 12 | | |
| Lesson | Standard | Description |
| 1, 2 | 3.2.12.C | Apply the elements of scientific inquiry to solve multi-step problems. |
| 3 | 3.3.10.D.8 | Apply the concept of natural selection to illustrate and account for a species' survival, extinction or change over time. |
| 3 | 3.8.12.A.2 | Evaluate technological developments that have changed the way humans do work and discuss their impacts (e.g., genetically engineered crops). |
| 2 | 3.8.12.A.3 | Evaluate socially proposed limitations of scientific research and technological application. |
| 5 | 3.8.12.C.2 | Analyze scientific and technological solutions through the use of risk/benefit analysis. |
| 3, 5 | 3.8.12.C.3 | Analyze and communicate the positive or negative impacts that a recent technological invention had on society. |
| 3, 4, 5 | 3.8.12.C.4 | Evaluate and describe potential impacts from emerging technologies and the consequences of not keeping abreast of technological advancements (e.g., assessment alternatives, risks, benefits, costs, economic impacts, constraints). |
| Pennsylvania Academic Standards for Reading, Writing, Speaking, and Listening – Grade 11 | | |
| Lesson | Standard | Description |
| All lessons | 1.1.11.D | Identify, describe, evaluate and synthesize the essential ideas in text. Assess those reading strategies that were most effective in learning from a variety of texts. |
| 2, 3, 4 | 1.1.11.F | Understand the meaning of and apply key vocabulary across the various subject areas. |
| All lessons | 1.1.11.G.3 | Make extensions to related ideas, topics or information. |
| All lessons | 1.2.11.A | Read and understand essential content of informational texts and documents in all academic areas. |
| 3, 4, 5 | 1.5.11.B | Write using well-developed content appropriate for the topic. |
| 3, 4, 5 | 1.5.11.C.1 | Sustain a logical order throughout the piece. |
| All lessons | 1.6.11.A | Listen to others. |
| All lessons | 1.6.11.D | Contribute to discussions. |
| 2, 3, 4, 5 | 1.6.11.E.5 | Organize and participate in informal debate around a specific topic. |

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| 2, 3, 4, 5 | 1.6.11.F.1 | Use various forms of media to elicit information, to make a student presentation and to complete class assignments and projects. |
| 2, 3, 4, 5 | 1.8.11.B | Locate information using appropriate sources and strategies. |
| 2, 3, 4, 5 | 1.8.11.C | Organize, summarize and present the main ideas from research. |
| Pennsylvania Academic Standards for Mathematics – Grade 11 | | |
| Lesson | Standard | Description |
| 1, 3 | 2.2.11.A | Develop and use computation concepts, operations and procedures with real numbers in problem-solving situations. |
| Pre-lesson | 2.2.11.B | Use estimation to solve problems for which an exact answer is not needed. |
| 2, 3 | 2.2.11.A | Develop and use computation concepts, operations and procedures with real numbers in problem-solving situations. |
| 2, 4 | 2.4.11.B | Construct valid arguments from stated facts. |
| 1, 2 | 2.5.11.B | Use symbols, mathematical terminology, standard notation, mathematical rules, graphing and other types of mathematical representations to communicate observations, predictions, concepts, procedures, generalizations, ideas and results. |
| Pre-lesson1, 2, 3 | 2.5.11.C | Present mathematical procedures and results clearly, systematically, succinctly and correctly. |
| Pre-lesson, 1, 3, 4 | 2.8.11.Q | Represent functional relationships in tables, charts and graphs. |
| Pennsylvania Academic Standards for Health, Safety, and Physical Education – Grade 12 | | |
| 3, 4, 5 | 10.1.12.A.1, 2, 3 | Evaluate factors that impact growth and development during adulthood and late adulthood: acute and chronic illness, communicable and noncommunicable disease, health status. |
| 3, 4, 5 | 10.1.12.B.2 | Evaluate factors that impact the body systems and apply protective/preventive strategies: environment (e.g., pollutants, available health care). |
| 1, 3, 4, 5 | 10.1.12.B.3 | Evaluate factors that impact the body systems and apply protective/preventive strategies: health status (e.g., physical, mental, social). |
| 3, 4, 5 | 10.1.12.E | Identify and analyze factors that impact/influence the prevention and control of health problems: research, |

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| | | medical advances, and/or technology. |
| 4 | 10.2.12.A | Evaluate health care products and services that impact adult health practices. |
| 5 | 10.2.12.B | Assess factors that impact adult health consumer choices. |
| 3, 4, 5 | 10.2.12.D | Examine and apply a decision-making process to the development of short and long-term health goals. |
| 3, 4, 5 | 10.2.12.E.2 | Analyze the interrelationship between environmental factors and community health: individual choices/maintenance of environment. |